

X. A PELAGIC SEA-ANEMONE WITHOUT TENTACLES.

By N. ANNANDALE, D.Sc., Superintendent, Indian Museum.

During a visit to Puri, on the Orissa coast of the Bay of Bengal, my assistant brought me (on February 1st, 1909) a number of small, more or less globular bodies which he had found on the beach at the edge of the waves. A careful search revealed many more. On examination these bodies proved to be Actiniaria in a state of contraction. On being placed in clean sea-water they immediately changed their shape, becoming narrowly conical instead of globular; but no tentacles appeared. The oral extremity became nearly flat, the peristome being distinguished from the column by its greater translucency as well as its position. The mouth was conspicuous, forming a relatively long, narrow slit expanded at one end. The whole animal had a milky appearance, which concealed its internal organs; the exterior had a pale vinous colour, which deepened into brown at the aboral pole. A circular pore was easily seen at this pole.

As these Actinians evidently represent a form very different from any previously described, I propose to call them *Anactinia pelagica*, gen. et sp. nov., in allusion to their lack of tentacles and their pelagic habit. Although none of my specimens have gonads in a recognizable condition, I do not think that they represent a larval stage, for on the one hand the large number of mesenteries they possess, and on the other the fact that many Actinians only exhibit sexual activity at certain times of year, is evidence to the contrary. Several forms have, however, been described by van Beneden as larvæ which possess a considerable number of mesenteries. The following description is based on the dissection and sectioning of a number of specimens as well as on the superficial examination of living and preserved material.

STRUCTURE.

Column.—The column may be any shape between globular and conical, the aboral end being pointed in the latter case and the peristome nearly flat. These differences in form are due solely to the state of contraction or expansion of the muscles. My largest specimens measured, when fully expanded, about 12 mm. in length and 4 mm. in transverse diameter across the peristome, which met the walls of the column practically at a right angle. In such specimens the aboral extremity measured only 1 mm. in diameter, the